Role of GOSIC in Facilitating Access to GCOS Data and Information

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- GOSIC provides access to GCOS, GTOS and GOOS data and information

- On average the GOSIC web site gets about 2500 hits a day from over 70 countries

- GOSIC is being added to data clearinghouses

- The top GOSIC user community is comprised of:

    - 60% academia
    - 20% government
    - 20% military

- **The GOSIC server is being moved to NCDC on September 19th and is planned to become operational on October 1**

- **GOSIC provides access to GCOS datasets and product held at NCDC**

- **Several products have been developed in the last year**

GSN Data Access Matrix (GOSIC Web Site)

Facilitating Access to Global Observing Systems Data & In

GSN Data

	GSNMC/DWD precipitation	GSNMC/JMA temperature	NOAA/NCDC	Contact
Daily data			✓	NCDC Contact list
Quick data	✓			udo.schneider@dwd.de
By country or station			✓	NCDC Contact list
Monthly and daily datasets			✓	NCDC Contact List
Surface Hourly Observations and CLIMAT Data Counts (past 6 months)			✓	Larry.J.Griffin@noaa.gov
Surface Hourly Counts by Report Types (current year)			✓	Larry.J.Griffin@noaa.gov
Surface Hourly Observations and CLIMAT Data Counts (text format) (2001 to current)			✓	Larry.J.Griffin@noaa.gov
Summary of Surface Hourly Observations and CLIMAT Data (query format) (2001 to current)			(under development)	Larry.Nicodemus@noaa.gov
Monitoring Products	✓			udo.schneider@dwd.de
Change Log: stations list	✓			udo.schneider@dwd.de

GSN Information Matrix (GOSIC Web Site)

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GSN Information

	GSNMC/DWD precipitation	GSNMC/JMA temperature	NOAA/NCDC	WMO/GCOS secretariat	GOSIC	Contact
Background information	✓		✓			udo.schneider@dwd.de
Initial Selection			✓			Thomas.C.Peterson@noaa.gov
Purpose					✓	
Flow Diagram					✓	
Monitoring Center	✓				✓	
Observing Requirements					✓	
Program Overview					✓	
Quality control					✓	
Health of the Networks			✓			helen.frederick@noaa.gov matthew.menne@noaa.gov
Station List				✓		gcosjpo@wmo.int
Station Map			✓	✓		gcosjpo@wmo.int
Station Metadata					✓	
References					✓	
Poster				✓		Thomas.C.Peterson@noaa.gov

GSN Station Pictures Matrix (GOSIC Web Site) (partial view)

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GSN Stations Metadata

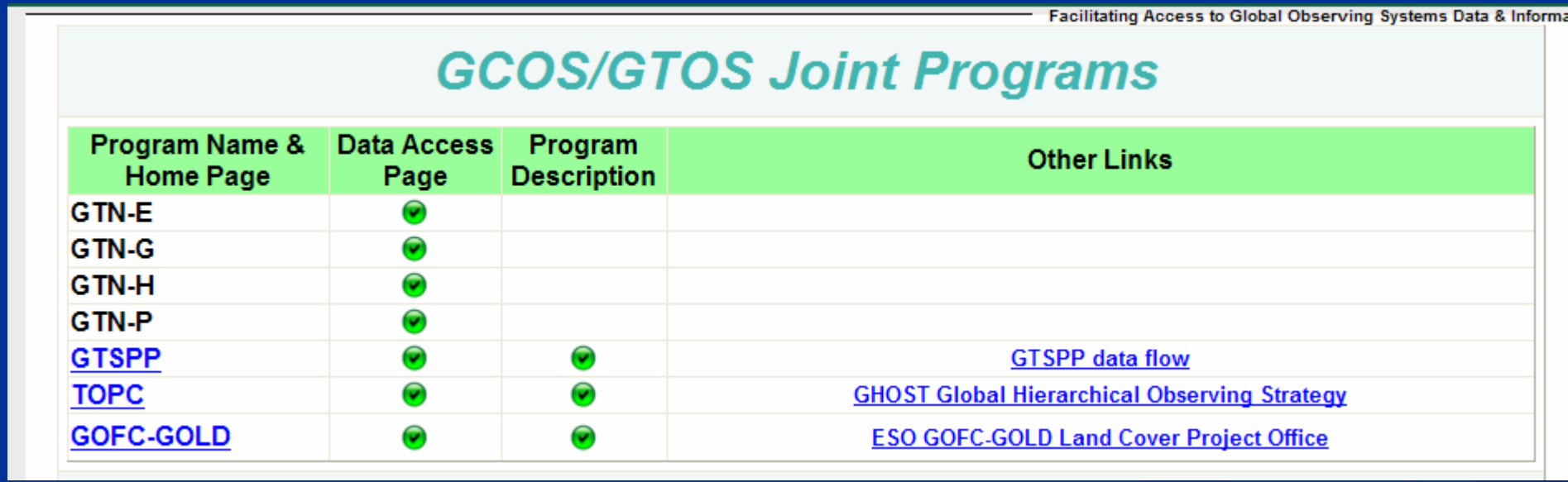
WMO Region	Country	Station	Station Number	Link to NOAA/MMR	Pictures
II	Nepal	Katmandu Airport	44454		
IV	Bahamas	Nassau Airport New Providence	78073		
	Barbados	Grantley Adams	78954		
	Cayman Islands	Owen Roberts Airport Grand Cayman	78384		
	Colombia	San Andres Island/Sesquicentenario	80001		
	Costa Rica	Puerto Limon	78767		
	El Salvador	Acajutla	78650		
	Jamaica	Montego Bay/Sangster	78388		
	Mexico	Chihuahua	76225		
		Guanajuato	76577		
		La Paz, BCS	76405		
		Manzanillo, Col.	76654		
		Mazatlan	76458		
		Aerop. Internacional Merida, Yuc.	76644		
		Mexico (Central), D.F.	76680		
		Monterrey, N.L.	76393		
		Salina Cruz, OAX	76833		
		Tampico	76548		
		Veracruz	76692		

GCOS/GOOS Joint Programs (GOSIC Web Site)

GCOS/GOOS Joint Programs

Program Name & Home Page	Data Access Page	Program Description	Other Links
GLOSS	✓	✓	GLOSS Station Handbook
DBCP	✓	✓	
PIRATA	✓	✓	
SOOP	✓	✓	
TAO	✓	✓	
TRITON	✓	✓	
GTS	✓		
GTSPP	✓	✓	GTSPP data flow
Ocean observations from the operational satellites of NOAA and other entities	✓		
VOS	✓	✓	
Time Series Station BRAVO in the Labrador Sea			

GCOS/GTOS Joint Programs Matrix (GOSIC Web Site)



Facilitating Access to Global Observing Systems Data & Informa

GCOS/GTOS Joint Programs

Program Name & Home Page	Data Access Page	Program Description	Other Links
GTN-E	✓		
GTN-G	✓		
GTN-H	✓		
GTN-P	✓		
GTSPP	✓	✓	GTSPP data flow
TOPC	✓	✓	GHOST Global Hierarchical Observing Strategy
GOFC-GOLD	✓	✓	ESO GOFC-GOLD Land Cover Project Office

GCOS Information – Development of the GCOS Networks (GOSIC Web Site)

Development of the GCOS Networks and Data

The requirements of GCOS for climate observations are specified by the following scientific panels:

- **Surface, upper air, marine, meteorology and atmospheric chemistry composition** - Atmospheric Observations Panel for Climate (AOPC)
- **Ocean climate** - Ocean Observing Panel for Climate (OOPC)
- **Terrestrial climate** - Terrestrial Observation Panel for Climate (TOPC)

List of National Focal Points for GCOS and Related Climatological Data

Surface Meteorological Observations

The **GCOS Surface Network** (GSN) is a global network of 1009 stations collecting surface meteorological observations.

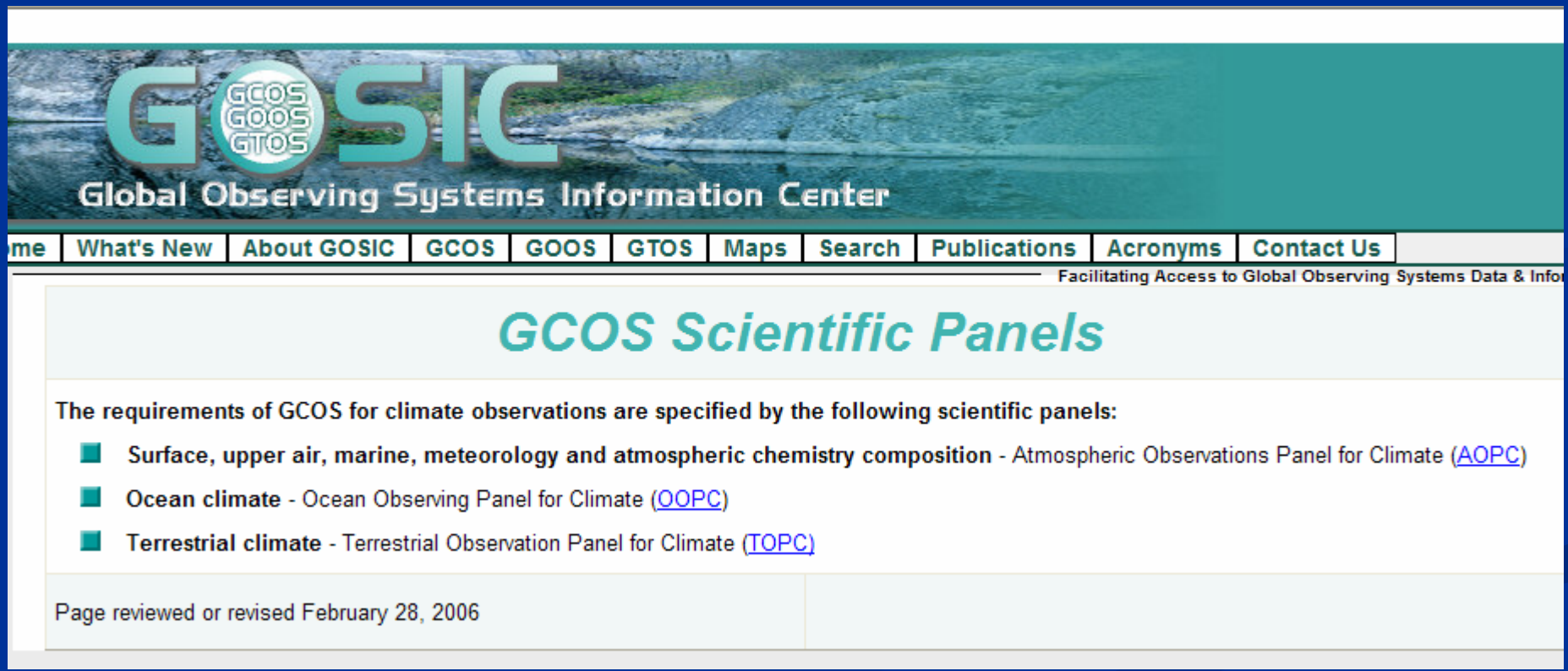
For a more complete discussion of the requirements for GSN and GUAN data including accuracy and homogeneity, historical records, and national commitments to observations see the GCOS publication **Guide to the GCOS Surface and Upper-Air Networks: GSN and GUAN** (Version 1.1) GCOS - 73 .

- Purpose of the GSN
- Development of the Requirements
- Specification of Observing Requirements
- Monitoring Products from the GSN Monitoring Centers
- Quality Control of GSN Data
- Data Flow Diagram
- GSN Program overview page
- NOAA/NCDC GSN web page
- Maps of GSN Stations / List
- Reference Publications for the GSN

Upper Air Observations

- Purpose of the GUAN

GCOS Information – GCOS Scientific Panels (GOSIC Web Site)



GCOS Information – GCOS Publications (GOSIC Web Site)

GCOS Publications

Publications on WMO web site

- GCOS publications on WMO web site
- Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC (October 2004)
- Analysis of Data Exchange Problems in Global Atmospheric and Hydrological Networks Summary Report
- Second Report on the Adequacy of the Global Observing Systems for Climate (April 2003):
  | Full Report | | Executive Summary | | Technical Supplement (Draft) |
- GCOS Brochure (jpg format)
- GCOS Poster (pdf format)
- GSN-GUAN Poster (pdf format)
- GHOST Brochure (pdf format)

Searchable Database of Publications

(•) by Year ( ) by Title	(•) All publications ( ) Only GCOS publications ( ) Only GOOS publications ( ) Only GTOS publications
Search Publications	

GCOS Information – GCOS Maps (GOSIC Web Site)

Facilitating Access to Global Observing Systems Data & Info

Maps

The NOAA Observing System Architecture (NOSA) offers an interactive map viewer that includes data of the GCOS, GTOS and GOOS networks:

- NOSA Interactive Map Viewer

GCOS

The GCOS Surface Network (GSN)

- GSN Stations (Station map - Provided by NOAA/NCDC)
- GSN Stations (World map with shaded relief showing stations - Provided by NOAA/NGDC)

The GCOS Upper-Air Network (GUAN)

- GUAN Stations (Monthly monitoring products - Provided by GUANWeb)
- GUAN Stations (World map with shaded relief showing stations - Provided by NOAA/NGDC)

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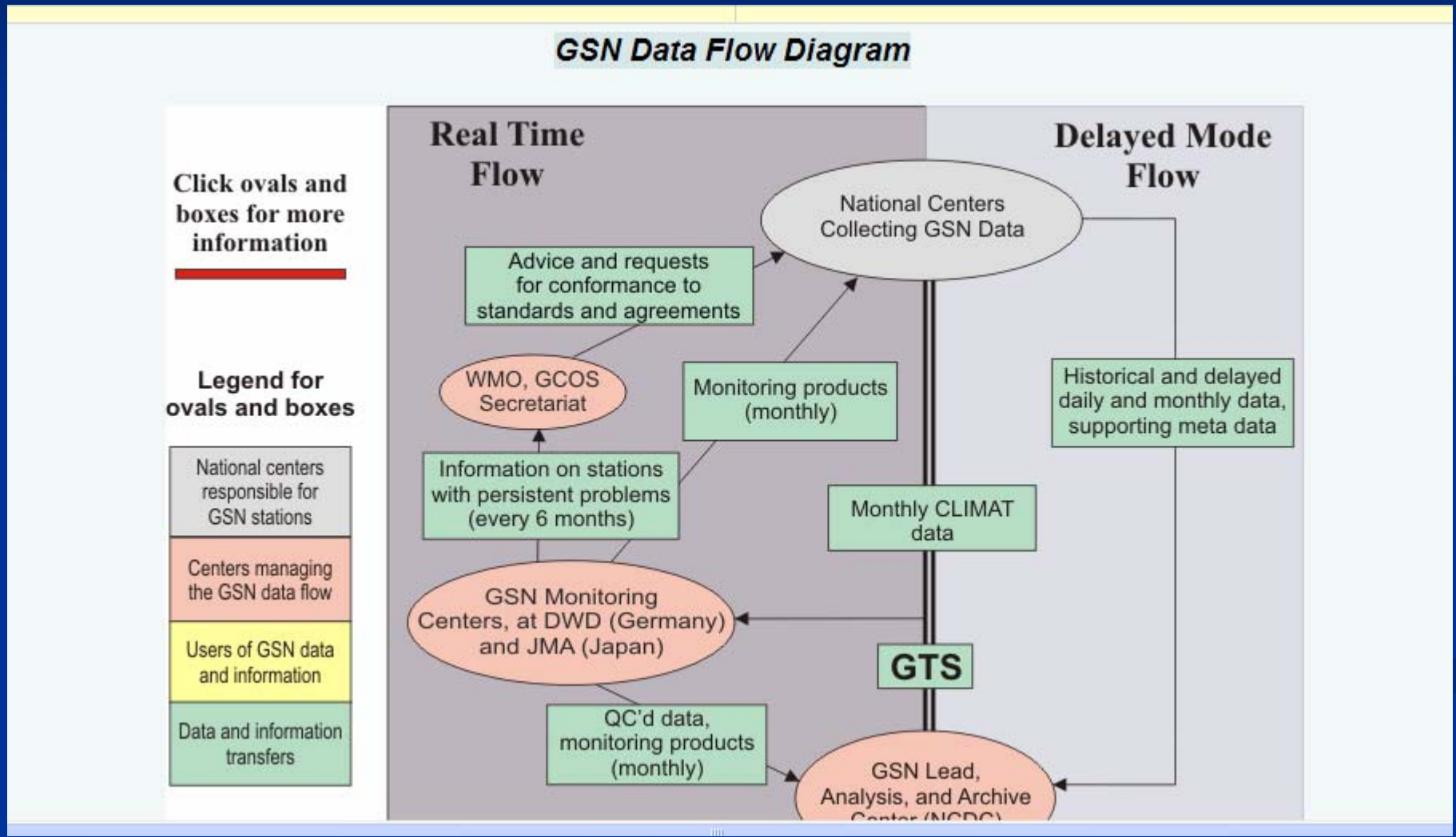
Global Atmosphere Watch (GAW)

- GAW Station Information System (GAWSIS)

Voluntary Observing Ships (VOS)

- VOS (Shaded relief map showing stations - Provided by NOAA/NOSA)

GCOS Information – GCOS Data Flow diagram (GOSIC Web Site) (Partial view)



GOSIC NCDC Partnership

- GOSIC and NCDC staff are working together to make GCOS datasets and products available to the Global Observing System Community.

- GOSIC Users are giving feedback through GOSIC on problems accessing NCDC GCOS datasets.

- NCDC held datasets are being added to high visibility portals such as the GCMD and GeoNetwork. GCOS has a GCMD portal on GOSIC. GSN data are being added to GeoNetwork.

- Joint projects with NCDC such as the GSN metadata input to NMMR.

- Support of GCOS regional programs such as PI-GCOS and US GCOS.

- GOSIC can facilitate communication between the WDCs and the G3OS.